

Application No. 10/754,390

Reply to Office Action

*REMARKS/ARGUMENTS**The Pending Claims*

Claims 1-21 are pending. Claims 1-17 are directed toward a polishing pad comprising a porous polymeric material, wherein the porous polymeric material has a negative Poisson's ratio. Claims 18-21 are directed toward a method of polishing with the aforementioned polishing pad. Reconsideration of the claims is respectfully requested.

*Summary of the Office Action*

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) as obvious over Reinhardt (i.e., U.S. Patent 6,095,902) in combination with the BASF publication entitled Elastollan – Material Properties, alone or in further combination with Shiro et al. (i.e., U.S. Patent 6,705,934), Sevilla et al. (i.e., U.S. Patent 6,126,532), Suzuki et al. (i.e., U.S. Patent 6,120,353), Osterheld et al. (i.e., U.S. Patent 6,241,596), and Tang (i.e., U.S. Patent 5,949,927).

*Summary of Examiner Interview*

Applicants thank Examiner Muller for the courtesies extended to Applicants' agent Caryn Borg-Breen, during the telephonic interview of February 23, 2006. The obviousness rejections were discussed, consistent with the remarks set forth herein.

*Response to the Obviousness Rejections*

Applicants respectfully traverse the obviousness rejections of claims 1-21 because the cited references fail to teach or suggest a polishing pad comprising a porous polymeric material having a Poisson's ratio less than 0.

Although the values obtained from the cited MatWeb website ([www.matweb.com](http://www.matweb.com)) for modulus of elasticity (E) and shear modulus (G) of Elastollan C 64 D when plugged into the formula  $E = 2G(1 + \nu)$  produce a value for the Poisson's ratio ( $\nu$ ) that is negative, the cited BASF material nevertheless is not a porous polymeric material having a negative Poisson's material as recited by the pending claims. In particular, the values for the modulus of elasticity and shear modulus reported on the MatWeb website were not reported at the same temperature. As discussed in the accompanying Declaration under 37 C.F.R. § 1.132 of Abaneshwar Prasad, the Poisson's ratio calculated from the modulus of elasticity and shear modulus of Elastollan C 64 D at the same temperature (taken from graphs of the modulus of elasticity and the shear modulus as a function of temperature provided on page 8, Fig. 3, and page 12, Fig. 11, respectively, of the BASF Publication) is at all temperatures positive. Thus the data provided in the BASF publication illustrate that the Elastollan C 64 D material does not have a negative Poisson's ratio as alleged in the Office Action. As such, the combination

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of the Elastollan C-64D polymer from the BASF publication and polishing pad from Reinhart does not yield the invention described in the pending claims. Shiro et al., Sevilla et al., Suzuki et al., Osterheld et al., or Tang alone or in combination also fail to teach or disclose a polishing pad comprising a porous polymeric material with a negative Poisson's ratio, and thus do not cure the deficiencies of Reinhardt and the BASF publication.

In view of the foregoing, the subject matter of claims 1-21 cannot properly be considered obvious in view of the cited references. Accordingly, Applicants respectfully request that the obviousness rejections be withdrawn

*Conclusion*

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

  
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John Kilyk, Jr., Reg. No. 36763  
LEYDIG, VOIT & MAYER, LTD.  
Two Prudential Plaza, Suite 4900  
180 North Stetson Avenue  
Chicago, Illinois 60601-6780  
(312) 616-5600 (telephone)  
(312) 616-5700 (facsimile)

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